

CLAIMS

What is claimed is:

1. In a differential pressure flow element and instrument system requiring a
purge fluid means and having a high pressure connection in fluid communication
5 with a first instrument tubing and a low pressure connection in fluid
communicating with a second tubing, wherein the improvement comprises:

a free standing flow element manual purge system ready to install to said
first instrument tubing and said second instrument tubing and for providing a
means of manually purging said flow element and instrument tubing using high
10 pressure purge fluid in fluid communication therewith through said free standing
flow element manual purge system.

2. The improvement of Claim 1, wherein said manual purge system is
adaptable to be attached to an automatic purge system without disconnecting
15 said instrument tubing from said manual purge system.

3. The improvement of Claim 1, wherein said free standing flow element
manual purge system comprises:

a first purge/operate valve connected to said high pressure tubing and
20 having an exit port;

a second purge/operate valve connected to said low pressure tubing and

having an exit port;

each said purge/operate valve in fluid communication with a high pressure
purge fluid source;

wherein each said exit port is in fluid communication with the inlets of an

5 instrument zeroing and isolating valve.

4. The improvement of Claim 3, wherein said free standing flow element
manual purge system further comprises:

10 a differential pressure instrument in fluid communication with said outlets
of said zeroing and isolating valve.

5. The improvement of Claim 4, wherein said free standing flow element
manual purge system further comprises:

15 removable connection means within the connection between said
instrument zeroing and isolating valve and said differential pressure instrument;
wherein said removable connection means is adaptable to be reconnected to an
automatic purge system if later required.

20 6. The improvement of Claim 3, wherein each said purge/operate valve
comprises a three-way valve having an entry port, an exit port, and a discharge
port.